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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/642,962 | 08/14/2003 | Sameer Desai | RUS0107 | 4168 |
| 7590 | 11/24/2004 | | EXAMINER | |
| Valeo Inc 4100 North Atlantic Boulevard Auburn Hills, MI 48326 | | | FLANDRO, RYAN M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3679 | |

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|----------------------------|--------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/642,962 | DESAI ET AL. <i>S</i> | |
| | Examiner Ryan M Flandro | Art Unit 3679 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 14 August 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/12/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a. Page 2, line 16: the word “dislodge” should be changed to --dislodged--.
 - b. Page 10, line 19: the phrase “may allow motion as well as motion” is nonsensical
 - c. Appropriate correction is required.

Priority

2. If applicant desires priority under 35 U.S.C. 119(e) based upon a previously filed application, specific reference to the earlier filed application must be made in the instant application. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph unless it appears in an application data sheet. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression “now Patent No. _____” should follow the filing date of the parent application. If a parent application has become abandoned, the expression “now abandoned” should follow the filing date of the parent application.

If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant

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application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claims 1-18 are incomplete for omitting essential structural cooperative relationships of elements; such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01 (a claim which fails to interrelate essential elements of the invention as defined by applicant(s) in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention); see also *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976); *In re Collier*, 397 F.2d 1003, 158 USPQ 266 (CCPA 1968). The omitted structural cooperative relationships include how the relative structural components of the first attachment component (i.e., the slot wall, slot tab, flexible member, stop wall and stop edge) cooperate with the structural components of the second attachment component (i.e., the mating bracket and flange). Recitation that the first and second components are “approximately parallel” and that the “bracket is aligned with the opening formed by the slot walls” is not deemed to be sufficient.

Claim Objections

5. Claims 1, 13 and 18 are objected to because of the following informalities:
- a. In line 2 of each claim, “slot wall” should read --a slot wall--, or --slot walls--, or --at least one slot wall--;
 - b. In line 2 of each claim, “slot tab” should read --a slot tab--;
 - c. In line 3 of claims 1 and 18, “stop wall” should read --a stop wall--.

- d. In lines 4-5 of claim 13 only, recitation of “**the** second attachment component” and “**the** bracket” should be changed to avoid antecedent basis problems since no second attachment component or bracket is previously recited.
 - e. Appropriate correction is required.
6. Claim 11 is objected to because of the following informalities: claim 11 recites “**the** alignment element is a post or locator post”. Because claim 11 depends directly from claim 2, which does not recite an alignment element, the claim should be amended to recite --an alignment element-- or to depend from claim 3 which positively recites an alignment element. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mahe et al (US 6,315,034) (Mahe).

a. Claim 1. Mahe shows and discloses a heat exchanger assembly, comprising a first attachment component **56** including slot wall[s] **50**, [a] slot tab **52**, a flexible member **42**, [a] stop wall **48**, and a stop edge **44** combination; a second attachment component **68**,

including a mating bracket **68** with flange **60** combination wherein the first attachment component **56** is approximately parallel to the second attachment component **68** and wherein the bracket **68** is aligned with the opening formed by the slot walls **50** of the first attachment component **56** (see figures 1-4; columns 1-3).

- b. Claim 13. Mahe shows and discloses a heat exchanger assembly comprising a first attachment component **56** including slot wall[s] **52**, [a] slot tab **54**, a flexible member **42**, an alignment element **58**, a stop wall **48**, and a stop edge **44** combination; wherein the first attachment component **56** is approximately parallel to [a] second attachment component **68** and wherein [a] bracket [thereof?] is aligned with the open area formed by the slot wall **50** or the alignment element **58** of the first heat exchanger component **56** and assembled using a sliding motion (see figures 1-4 and columns 1-4).
- c. Claims 2 and 14. Mahe further shows one attachment component **56** having at least one back up hole **70** for screws (see figures 1-4).¹
- d. Claim 3. Mahe further shows and discloses the attachment component **56** includes an alignment element **58** (see figures 1-4).
- e. Claim 4. Mahe further shows and discloses that the first attachment component **56** and second attachment component **68** are assembled using a sliding motion (see figures 1-4; column 4 line 7).
- f. Claims 5 and 15. Mahe further shows and discloses the first attachment component **56** and second attachment component **68** once assembled restrict movement in at least 2 directions (see figures 1-4).

- g. Claims 6 and 16. Mahe further shows and discloses the first attachment component **56** and second attachment component **68** once assembled restrict movement in at least 4 directions (see figures 1-4).
- h. Claim 7. Mahe further shows and discloses the first attachment component **56** flexible member **42** includes a snapping ledge **54** (see figures 1-4).
- i. Claim 8. Mahe further shows and discloses the bracket **68** is aligned with the alignment element **58** of the first attachment component **56** (see figures 1-4).
- j. Claim 9. Mahe further shows and discloses the flange **60** of the second attachment component **68** is fully captured under the slot tab **52** of the first attachment component **56** (see figures 1-4).
- k. Claim 10. Mahe further shows and discloses the attachment components **56,68** engage each other by snapping in (see figures 1-4).
- l. Claim 11. Mahe further shows and discloses [an] alignment element **66** being a post or locator post (see figures 3 and 4).
- m. Claim 12. Mahe further shows and discloses two or more of the attachment components **56** engage other components **68** by snapping in (see figures 1-4; esp. column 3 lines 33-37).
- n. Claim 17. Mahe further shows the slot tabs **54** are continuous (see figures 1-4).
- o. Claim 18. Mahe shows and discloses an assembly comprising a first attachment component **56** including slot wall[s] **50**, [a] slot tab **52**, a flexible member **42**, [a] stop wall **48**, and a stop edge **44** combination; a second attachment component **68**, including a

¹ The Examiner notes that claim 2 does not positively recite the screws or that screws are inserted through the

mating bracket **68** with flange **60** combination; wherein the first attachment component **56** and the second attachment component **68** are assembled using a sliding motion (column 4 line 7) and wherein the components **56,68**, once assembled, restrict movement in at least 2 directions (see figures 1-4; columns 1-4).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to general snapping assembly connections:

U.S. Patent 6,691,767 B2 to Southwick et al. (see figures 2-7)

U.S. Patent 4,986,766 to Leonard et al. (see e.g., figure 1)

U.S. Patent 3,752,553 to Bildahl et al. (see figures 2-7)

U.S. Patent 3,403,641 to Baker (see figures 1 and 2)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M Flandro whose telephone number is (703) 305-6952. The examiner can normally be reached on 9:00am- 6:00pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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November 22, 2004

Daniel P Stodola

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